

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A luminaire comprising:

a light-directing element having a light emission window,  
said light-directing element having a shape for directing  
light, which light originates from an electric light source to be  
accommodated, into an optical fiber system,

characterized in that said shape is calculated in  
accordance with a ray-tracing algorithm which takes into account  
that said light source to be accommodated is voluminous.

2. (original) A luminaire according to claim 1, characterized in  
that said shape is composed of n solids of revolution of parabolic  
sectors, wherein adjoining parabolic sectors form an integral  
surface.

3. (original) A luminaire according to claim 2, characterized in  
that the parabolic sectors are parts of parabola defined by the  
following set of equations:

$$a(i) = (z(i) - z(i + 1)) / (x(i)^2 - x(i+1)^2)$$

$$b(i) = a(i)$$

$$c(i) = (x(i)^2 * z(i + 1)) - ((x(i + 1)^2 * z(i)) / (x(i)^2 - x(i + 1)^2))$$

wherein:

$a(i)$ ,  $b(i)$  and  $c(i)$  are polynomial coefficients of the parabolic sectors

such that coordinates of each point of the reflective surface fulfill the condition:

$$a(i)*x^2 + b(i)*y^2 - z + c(i) = 0;$$

$x$ ,  $y$ ,  $z$  are coordinates of the  $i^{\text{th}}$  surface of revolution of the parabola in a linear  $x$ ,  $y$ ,  $z$  tri-coordinate system;

the coordinates  $x(i)$ ,  $z(i)$ ,  $x(i+1)$ ,  $z(i+1)$  are limits of the  $i^{\text{th}}$  parabolic sector in a plane  $xz$ ;

$i$  is an integer from 1 to  $n$ .

4. (currently amended) A luminaire according to claim 1, ~~2 or 3~~, characterized in that the light-directing element is chosen from the group consisting of a reflector, a refractor, and a combination thereof.

5. (currently amended) A luminaire according to claim 1, ~~2, 3, or 4~~, characterized in that the light source is an electric lamp.

6. (original) A luminaire according to claim 5, characterized in that the electric lamp is a Light Emitting Diode.

7. (currently amended) A luminaire according to ~~any one of the preceding claims~~claim 1, characterized in that the optical fiber system comprises a bundle of optical fibers.

8. (original) A luminaire according to claim 7, characterized in that a glass rod is positioned at an end of the optical fiber.

9. (currently amended) A dynamic road-marking unit comprising a luminaire according to ~~any one of the preceding claims~~claim 1.

10. (original) A dynamic road-marking unit according to claim 9, characterized in that the luminaire has a shaped housing adapted to fit a saw-cut recess for accommodating the unit.